Drag Racing Coil Rate Charts

(For Drag Racing use only.)

Recommended Front Spring Rates - Drag Racing	
Spring Rate:	**Total Weight on Front Wheels:**
200	under 800 lbs.
250	800-1000 lbs.
275	1000-1100 lbs.
300	1100-1200 lbs.
350	1200-1500 lbs.
400	1500-1800 lbs.
450	1800-2000 lbs.
500	2000-2300 lbs.
550	2300-2500 lbs.
650	2600 and up

Recommended Rear Spring Rates - Drag Racing	
Spring Rate:	**Total Weight on Rear Wheels:**
70	under 800 lbs.
80	800-1000 lbs.
100	1000-1100 lbs.
120	1100-1200 lbs.
140	1200-1300 lbs.
160	1300-1400 lbs.
180	1400-1500 lbs.
200	1600-1800lbs.
250	1800-2400 lbs.
300	2400 and up

Spring Rate Selector: Which Springs Are Right For Me?

Four factors help you determine which spring and spring rate are right for your vehicle. The factors are: 1) Base Vehicle Weight, 2) Vehicle Features Weights, 3) Coil Rate Calculation, 4) Mounting Angle.

1) Base Vehicle Weight

Street Rod - Average Vehicle Weight Chart

YEAR	MAKE	MODEL	FRONT	REAR
1927	Ford	Coupe	1200	1300
1928-31	Ford	Coupe	1300	1400
1932-34	Ford	Coupe	1400	1600
1935-38	Ford	Coupe	1600	1700
1939-40	Ford	Coupe	1700	1800
1946-48	Ford	Coupe	1750	1700
1932-38	Chevy, Plymouth, Dodge	Coupe	1500	1550
1939-40	Chevy, Plymouth, Dodge	Coupe	1600	1600
1947-1953	Chevrolet	Pickup	1950	1500
1954-1958	Chevrolet	Pickup	2250	1750
1947-1953	Ford	Pickup	2000	1550
1954-1958	Ford	Pickup	2150	1650
1927-1975	Other	Other	Please Call	Please Call

*Two cars that appear to have the same weight can be substantially different in weight mass and distribution front-to-rear.

*Average weights above include: One driver, Small Block Chevy V8, Automatic Trans, Full interior, Fuel & Spare Tire

2) Vehicle Features Weights

Street Rod - Adjust Spring Rate *Add or subtract front and rear weights from above using this chart below (Based on your vehicle features)

FEATURE	FRONT	REAR
Big-Block V8	+ 200 lbs.	+ 50 lbs.
Other Small Block V8	+ 50 lbs.	+ 50 lbs.
V6	+ 50 lbs.	+ 50 lbs.
4-Door	+ 50 lbs.	+ 150 lbs.
Panel or Delivery	+ 100 lbs.	+ 200 lbs.
Full Fendered	+ 100 lbs.	+ 150 lbs.
Fenderless	- 100 lbs.	- 100 lbs.
Supercharger	+ 50 lbs.	+ 50 lbs.
Air Conditioning	+ 50 lbs.	+ 50 lbs.

3) Calculating Your Coilover Coil Rate

Calculating Your Coilover Spring Rate for (REAR) Solid Axle.
*Use your data from Step 1 and Step 2 above.

Street Rods - (REAR) Solid Axle Calculation

Line 1 Rear Weight = (Weight of Vehicle) x (.5)

Line 2 Sprung Weight = (Rear Weight of Vehicle) - (300 lb)
*The number you're subtracting here (300 lb) accounts for the rear end, brakes, etc. - Everything bolted to the rear axle.

Line 3 Weight on each spring = (Sprung Weight)/2

Line 4 Spring Rate = (Weight on each spring)/(Spring compression)
* Spring compression is the amount in inches your coil spring will be compressed. See example below for a theoretical coil rate calculation.

Example of Spring Rate Calculation (Using Above Equation):

Weight of example vehicle: 3400 lb vehicle

Line 1 Rear Weight: (3400 lb) x (.5) = 1700 lb

Line 2 Sprung Weight: (1700 lb) - (300 lb) = 1400 lb

Line 3 Weight on each spring: (1400 lb)/2 = 700 lb

Line 4 Spring Rate: (700 lb)/2.5 = 280 lb

Line 5 We'd recommend using a 300 lb coil spring on each coilover of this vehicle's rear end.

Late Models
*For Late Model vehicles, input the equation below in place of "Rear Weight."
Rear Weight = (Weight of Vehicle) X (.45)

4) Mounting Angle

Using the spring rate determined in Step 3, Line 5 above - Now it's time to account for the mounting angle of your coilover to determine the most optimal, and final spring rate for your vehicle.

Mounted Shock Angle	10°	15°	20°	25°	30°	35° or Greater
Correction Factor	0.98	0.93	0.88	0.82	0.75	Please Call

- Using the 300 lb spring determined in Step 3 on Line 5 above, lets factor in our mounting angle.
*We'll use a mounting angle of 30° for this example.
- Mounting Angle (30°) has a Correction Factor (0.75)
*See Table A. above

Equation:
Spring Weight (From Step 3, Line 5)/Correction Factor = Optimal Spring Rate

Example:
(300)/(0.75) = 400 (We'd recommend running a 400 lb coil spring in this example for optimal handling and ride quality.)